

**FUTURE FISHERIES IMPROVEMENT PROGRAM  
GRANT APPLICATION***(please fill in the highlighted areas)***I. APPLICANT INFORMATION**

- A. Applicant Name: Roger Muggli
- B. Mailing Address: 322 Wyttenhove Ln
- C. City: Miles City State: MT Zip: 59301  
Telephone: 406-951-0296 E-mail:
- D. Contact Person: Caleb Bollman  
Address if different from Applicant: PO Box 1630  
City: Miles City State: MT Zip: 59301  
Telephone: 406-234-0914 E-mail: cbollman@mt.gov
- E. Landowner and/or Lessee Name (if other than Applicant): Tongue & Yellowstone River Irrigation District  
Mailing Address: RR 1 Box 2216  
City: Miles City State: MT Zip: 59301-9215  
Telephone:  E-mail:

**II. PROJECT INFORMATION\***

- A. Project Name: Louver Galvanization Improvement of T&Y Irrigation Canal Fish Screens  
River, stream, or lake: Tongue River  
Location: Township: 6N Range: 48E Section: 29  
Latitude: 46.244789 Longitude: -105.749852 *within project (decimal degrees)*  
County: Custer
- B. Purpose of Project:  
A louvered fish screen structure was installed in 1999 to reduce fish entrainment into the T&Y Irrigation Canal. The metal louvers were originally coated with a 30 year protective coating. That coating is failing after just 15 years and in order to ensure that the louvers continue to screen out fish into the future Roger Muggli and Fish, Wildlife & Parks would like to have the screens removed, cleaned and galvanized between irrigation seasons.
- C. Brief Project Description:

Galvanization of the louvers will require removal by crane, trucking to a facility to be cleaned and prepped for galvanization, trucked to a galvanization facility, trucked back to the site and re-installed by crane.

D. Length of stream or size of lake that will be treated: \_\_\_\_\_

E. Project Budget:

**Grant Request (Dollars): \$ 9,335**

Contribution by Applicant (Dollars): \$ 11,565 In-kind \$ \_\_\_\_\_  
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): \$ \_\_\_\_\_ In-kind \$ \_\_\_\_\_  
(attach verification - See page 2 budget template)

**Total Project Cost: \$ 20,900**

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire ([fwp.mt.gov/habitat/futurefisheries/supplement2.doc](http://fwp.mt.gov/habitat/futurefisheries/supplement2.doc)).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

### III. PROJECT BENEFITS\*

A. What species of fish will benefit from this project?:

A survey in 1997 estimated 37,288 fish weighing 1,847 lbs. were entrained in the T&Y Canal during the 1997 irrigation season. Entrained fish from 22 species were documented in 1997 with flathead chubs most abundant accounting for 32% of the total number of fish observed. Other abundant species observed being entrained included: common carp (13%), longnose dace (13%), crappie (15%), and channel catfish (10%). In 2004 an estimated 26,376 fish of 14 species were entrained in the T&Y Canal and an estimated 13,424 fish of 17 species were screened out and returned to the Tongue River by the bypass channel during the irrigation season. In 2005 an estimated 22,481 fish of 17 species were entrained into the T&Y Canal and an estimated 8,460 fish of 19 species were returned to the Tongue River by the bypass channel during the irrigation season. In 2013 an estimated 22,798 fish of 22 species were entrained into the T&Y Canal and an estimated 29,791 fish of 24 species were returned to the Tongue River by the bypass channel during the irrigation season.

B. How will the project protect or enhance wild fish habitat?:

The proposed project will prolong the period of time for which the metal louvers will screen out a substantial number of Tongue River fish.

C. Will the project improve fish populations and/or fishing? To what extent?: \_\_\_\_\_

The proposed project has the potential to improve fish populations in the Tongue River as a long term result of the estimated average number of 17,225 fish of 20 species that are annually being screened out and returned to the Tongue River by the louvered fish screens. Adult channel catfish, walleye, smallmouth bass, and sauger are regularly screened out and returned to the Tongue River protecting angling opportunity for these sport fish that would otherwise be spread out over flood irrigated fields, while the vast majority of the entrainment protected fish are of non-game species that can have a positive impact on fishing through their forage relationship to sport fish in the Tongue and Yellowstone Rivers.

- D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

The project does not increase the quantity of public access to fishing but does protect and enhance the potential fishing opportunity immediately downstream on 12 Mile Fishing Access Site as well as at the other public access locations on the Tongue and Yellowstone Rivers within the migratory home range of the project site.

- E. If the project requires maintenance, what is your time commitment to this project?:

The irrigation district routinely cleans debris that collects on the screens as part of their operation of the headwork's and canal. Once galvanized the louvers should not need maintenance to the coating for decades.

- F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The high debris and suspended sediment load in the Tongue River caused the original metal louvered coating to prematurely fail and they are now rusting. Galvanizing the metal louvers will protect the louver from degrading from rust immediately and will provide a stronger coating than the original coating long term.

- G. What public benefits will be realized from this project?:

Continued entrainment protection of many species of the Tongue River and the subsequent benefit to angling is the benefit that will be realized by the public from this project.

- H. Will the project interfere with water or property rights of adjacent landowners? (explain):

The project will not interfere with water or property rights of adjacent landowners.

- I. Will the project result in the development of commercial recreational use on the site?: (explain):

No, I do not foresee the project resulting in development of commercial recreational use on the site.

- J. Is this project associated with the reclamation of past mining activity?:

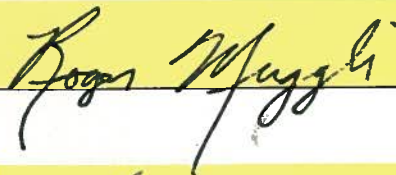
No

**Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.**

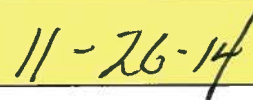
#### **IV. AUTHORIZING STATEMENT**

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature:



Date:



Sponsor (if applicable):



Fisheries Biologist Region 7

11/26/14

\*Highlighted boxes will automatically expand.

Mail To: Montana Fish, Wildlife & Parks  
Habitat Protection Bureau  
PO Box 200701  
Helena, MT 59620-0701

E-mail To: Michelle McGree  
[mmcgree@mt.gov](mailto:mmcgree@mt.gov)

Incomplete or late applications will be returned to applicant.  
Applications may be rejected if this form is modified.

\*\*\*Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.\*\*\*

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES	IN-KIND CASH	TOTAL
<b><u>Personnel</u></b>								
Survey				\$ -				\$ -
Design				\$ -				\$ -
Engineering				\$ -				\$ -
Permitting				\$ -				\$ -
Oversight				\$ -				\$ -
Labor	20	heavy machine t	\$100.00	\$ 2,000.00	2,000.00			\$ 2,000.00
			Sub-Total	\$ 2,000.00	\$ 2,000.00	\$ -	\$ -	\$ 2,000.00
<b><u>Travel</u></b>								
Mileage				\$ -				\$ -
Per diem				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
<b><u>Construction Materials</u></b>								
Sandblasting	10800	lbs of steel	\$0.75	\$ 8,100.00			8,100.00	\$ 8,100.00
Galvanizing	10800	lbs of steel	\$0.36	\$ 3,888.00	423.00		3,465.00	\$ 3,888.00
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 11,988.00	\$ 423.00	\$ -	\$ 11,565.00	\$ 11,988.00
<b><u>Equipment</u></b>								
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ -	\$ -	\$ -	\$ -	\$ -
<b><u>Mobilization</u></b>								
Trucking	10800	lbs of steel	\$0.64	\$ 6,912.00	6,912.00			\$ 6,912.00
				\$ -				\$ -
				\$ -				\$ -
				\$ -				\$ -
			Sub-Total	\$ 6,912.00	\$ 6,912.00	\$ -	\$ -	\$ 6,912.00
<b>TOTALS</b>				\$ 20,900.00	\$ 9,335.00	\$ -	\$ 11,565.00	\$ 20,900.00

## MATCHING CONTRIBUTIONS

[illegible]













# T&Y Irrigation Canal Louver Galvanization Project



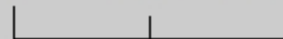
12 Mile FAS

Tongue  
River

Pumpkin  
Creek

-  Louver Fish Screens
-  T&Y Diversion Dam
-  Muggli Fish Passage
-  T&Y Irrigation Canal
-  12 Mile FAS
-  Camp Sites
-  New Road
-  Willow Soil Lift

0 162.5 325 Feet





P.O. Box 1630  
Miles City, MT 59301

November 26, 2014

Michelle McGree  
Habitat Protection Bureau  
PO Box 200701  
Helena, MT 59620-0701

Dear Michelle,

Thank you for your recent visit to Miles City to view some of the potential habitat improvement projects that we would like to complete in the near future. As we discussed while onsite at the T&Y Diversion Dam, the protective coating on the louvered fish screens that provide fish entrainment protection at the irrigation canal head gate is failing. To ensure longevity of the fish screens a project has been planned that involves removal of the screens, overland truck hauling to a facility where they will be cleaned and prepped, trucked to a nearby facility for galvanization and then trucked back and remounted in the irrigation canal prior to the 2015 irrigation season. Data supports the effectiveness of these screens (Tongue River Report 2013, appendix 1) and I support this effort to ensure they continue to provide entrainment protection for the Tongue River fishery for decades to come. This project represents a partnership between Roger Muggli (Tongue and Yellowstone River Irrigation District) and Fish, Wildlife & Parks with funding from the LP and Teresa Anderson Foundation. Please consider our Future Fisheries Grant Application seeking funding for the balance of the estimated cost of the project.

The public has not had nor will they have in the future unregulated public access to the project site. The project will directly benefit 12 Mile Fishing Access Site immediately downstream of the project site where there is public access.

Project Location: 46.244789 -105.749852

Sincerely,

Caleb Bollman  
Fisheries Biologist  
MT FWP, Region 7



**L.P. AND TERESA ANDERSON FOUNDATION**

P.O. BOX 190 • MILES CITY, MONTANA 59301-0190

PHONE (406) 232-3920 • FAX (406) 232-3923

June 21, 2013

Roger Muggli, Manager  
T & Y Irrigation District  
Rte. 1, Box 2216  
Miles City, MT 59301

Dear Mr. Muggli: *Roger*

We appreciate the fish passage and fish ladder you designed and constructed in coordination with the repair of the T & Y irrigation diversion at the Twelve Mile Dam. The interesting articles about the resulting, successful fish conservation does Custer County proud.

Please find enclosed a check for \$11,565. From our discussion, we understand you can bank it in a restricted fund designated for fish passage maintenance until you raise the balance and can get the work done this fall. Hopefully, some of the resources I shared will offer more options and cost-savings to consider.

Thank you for your contribution to the community and a more healthy Tongue River. We will look forward to hearing how your project is progressing.

Sincerely,

*Sandra*

Sandra Anderson

SKA/lo

Enclosure: Check

cc: Board of Directors  
Foundation File

225

**L.P. Anderson**

(1918-1994)

**Teresa L. Anderson**

(1919-1992)

**Sandra K. Anderson**

President

Director

**Jeffery A. Hunnes**

Secretary

Director

**John R. Tooke**

Treasurer

Director

**L. P. & TERESA ANDERSON FOUNDATION**

2502

P.O. BOX 190  
 MILES CITY, MT 59301-0190  
 PH. (406) 232-3920 FAX (406) 232-3923

DATE

June 30, 2013 393-524929 10

PAY  
 TO THE  
 ORDER OF

Custer Co. Ty Diversion District

\$ 11,565.00

DOLLARS

Security  
 Features  
 10  
 BCTL

**Stockman Bank**

700 Main St. - PO Box 250 - Miles City, MT 59301  
 406-234-9420 - 1-888-689-0724 (Telebank)  
 www.stockmanbank.com

for Ty Diversion & diversion maintenance  
 FOR 30/3/2013 District

⑈002502⑈ ⑆092905249⑆ 1010014455⑈

*John R. Tappin*  
*John R. Tappin*  
 MP